

Notice of Allowability

Application No.

10/781,417

Examiner

Allen C. Ho

Applicant(s)

BRAUSS, MICHAEL

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed on 18 February 2004.
2. ☒ The allowed claim(s) is/are 1-13.
3. ☒ The drawings filed on 18 February 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-13 are allowed over the prior art.
2. The following is an examiner's statement of reasons for allowance:

With regard to claims 1-8, although the prior art discloses a method for obtaining measurements of strength related characteristics of a part comprising the steps of providing a portable x-ray diffraction unit including an x-ray head and transporting the portable unit to a site at which the part is in service, it fails to teach or fairly suggest that the x-ray head has integrated adjustment mechanism for shifting the head in a plurality of different directions and the steps of shifting the x-ray head via the adjustment mechanisms to direct x-rays at various position on the part and generating a map of the part characteristic as claimed in claim 1.

With regard to claims 9-11, although the prior art discloses a method of measuring strains on load-bearing members while the members are subject to loads comprising the step of providing an x-ray diffraction apparatus, it fails to teach or fairly suggest the steps of mounting the apparatus to a load-bearing member and adjusting a fixture of the apparatus to allow the apparatus to be used with different sizes of load-bearing members as claimed in claim 9.

With regard to claim 12 and 13, although the prior art discloses a method for taking x-ray diffraction measurements from parts having multi-level or curved surfaces comprising the step of providing an x-ray head that is shiftable in a plurality of different directions, it fails to teach or fairly suggest the steps of teaching a controller for the x-ray head the shape of a portion of a part and shifting the x-ray head under command of the controller in a predetermined path based on

Art Unit: 2882

the taught shape of the part portion for directing x-rays at different positions therealong while keeping the x-ray head at a substantially constant distance therefrom as claimed in claim 12.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- (1) Mueller *et al.* (U. S. Patent No. 6,697,453 B1) disclosed a portable x-ray diffractometer.
- (2) Levert *et al.* (U. S. Patent No. 6,353,656 B1) disclosed a radioisotope based x-ray residual stress analysis apparatus.
- (3) Morgan *et al.* (U. S. Patent No. 5,614,720) disclosed a mobile apparatus for inspecting components of an operating system.
- (4) Ruud (U. S. Patent No. 5,148,458) disclosed an apparatus for simultaneous measurements of phase composition and residual stress by x-ray diffraction.
- (5) Korhonen *et al.* (U. S. Patent No. 5,125,016) disclosed an x-ray diffraction apparatus for measuring stresses.
- (6) Cohen *et al.* (U. S. Patent No. 4,095,103) disclosed a portable x-ray diffraction apparatus.

Art Unit: 2882

- (7) Ogiso (U. S. Patent No. 3,868,506) disclosed an x-ray diffraction instrument comprising an x-ray head that can be oriented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (571) 272-2491. The examiner can normally be reached on Monday - Friday from 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached at (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Allen C. Ho
Patent Examiner
Art Unit 2882